

REMARKS

Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Claim Objections

The minor informality noted by the Examiner has been corrected.

Claim Rejections

Applicant believes that the present invention is not antipated or obvious over the cited references. Therefore the prior art grounds of rejection are respectfully traversed.

Our claim 1 liquid crystal display element comprises a polarization plate, a phase difference plate, a liquid crystal layer, and a selectively reflective layer for reflecting part or all of circularly polarized light in a specific direction. Neither Omae et al. (USP 5,570,215) nor Manabe et al. (USP 6,411,355 B1), cited by the Examiner, comprises a selectively reflective layer. Our claimed liquid crystal display element comprises a selectively reflective layer independent of the phase difference plate. Therefore, our structural combination is different from those taught by these references.

The Examiner suggests that Omae et al. discloses a selectively reflective layer on lines 5-40 of column 20. However, this portion of the reference does not mention such a selectively reflective layer.

Our claim 1 liquid crystal display element includes: a polarization plate, phase difference plate, liquid crystal layer and selectively reflective layer which are formed so that the absolute value of the sum total of the product of the thickness and the difference between the first and second average refractive indexes of the phase difference plate, the product of the thickness and the difference between the first and second average refractive indexes of the liquid crystal layer, and the product of the thickness and the difference between the first and second average refractive indexes of the selectively refractive layer is 50 nm or less.

Omae et al. and Manabe et al. do not even have a selectively reflective layer, much less a combination meeting the limitations set forth in our claim 1. The references can not possible teach that the absolute value of the sum total of the product of the thickness and the difference between the first and second average refractive indexes of each element is 50 nm or less.

(2) Omae et al. does not mention the definition of a refractive index anisotropy Manabe et al. discloses, on lines 35-38 of column 14, as a definition of the refractive index

anisotropy Δn_1 is defined as difference $\Delta n_1 = n_e - n_o$, where “no” is a refractive index of a liquid crystal of a driving liquid crystal cell to the ordinary light, and “ne” is a refractive index of a liquid crystal cell to the extraordinary light. In contrast, according to the present invention, the refractive index anisotropy Δn is defined as a difference between an average refractive index in the vertical direction of a display plane and an average refractive index in the parallel direction of the display plane.

In short, although both the present invention and Manabe et al. use “ Δn ” as a refractive index anisotropy, the definitions of their refractive index anisotropies are different. The same definition as the refractive index anisotropy of the present invention is not disclosed Omae et al. or Manabe et al.


Further, the Examiner has indicated column 4, lines 55-60 of Manabe et al. This portion merely explains a phase difference means, but does not mention a selectively reflective layer.

Thus, our claimed inventions differ from Omae et al. and Manabe et al. taken alone or in combination.

In view of the foregoing, the claims are believed to be in condition for allowance, and such action is hereby solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,
Pillsbury Winthrop LLP

By: 
Glenn J. Perry
Reg. No.: 28458
Tel. No.: (703) 905-2161
Fax No.: (703) 905-2500

GJP\jjg
1600 Tysons Boulevard
McLean, VA 22102
(703) 905-2000